CLAIMS

What is claimed is:

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1. A method for improving the size and appearance of a healed wound comprising administering to an individual in need thereof a therapeutically effective amount of a cyclooxygenase inhibitor.

2. The method of Claim 1 wherein the cyclooxygenase inhibitor is administered with a suitable pharmaceutical carrier.

3. The method of Claim 1 wherein the healed wound is a scar.

4. The method of Claim 3 wherein the scar is selected from the group consisting of a hypertrophic scar, a keloid, Dupuytren's contractures, acne scars, a reactive scar, an excessive post-operative scar, and a fibrotic scar.

5. The method of Claim 1 wherein the cyclooxygenase inhibitor is present in a thermal insulating material.

6. The method of Claim 5 wherein the thermal insulating material comprises a hydrogel.

7. The method of Claim 1 wherein the amount of cyclooxygenase inhibitor that is administered comprises from about 40 micrograms to about 400 micrograms of cyclooxygenase inhibitor per square centimeter of treated tissue.

8. The method of Claim 1 wherein the cyclooxygenase inhibitor is selected from the group consisting of: salicylic acid; acetylsalicylic acid; aryl, substituted or unsubstituted aralkyl, allyl, and substituted or unsubstituted, linear, branched,

or cyclic alkyl esters of salicylic acid; aryl, substituted or unsubstituted aralkyl, allyl, and substituted or unsubstituted, linear, branched, or cyclic alkyl esters of acetylsalicylic acid; ibuprofen; celecoxib; rofecoxib; flufenamic acid; indomethacin; nabumetone; naproxen; pharmaceutically acceptable salts thereof; and blends thereof.

9. The method of Claim 8 wherein the ester of acetylsalicylic acid is selected from the group consisting of: methyl acetylsalicylate, ethyl acetylsalicylate, allyl acetylsalicylate, and benzyl acetylsalicylate.

10. The method of Claim 8 wherein the salt of salicylic acid is sodium salicylate.

11. The method of Claim 1 wherein the cyclooxygenase inhibitor is administered using a route of administration selected from the group consisting of: topically administering, orally administering, administering by injection, and combinations thereof.

12. The method of Claim 2 wherein the pharmaceutical carrier includes one or more substances that relieve skin irritation when the cyclooxygenase inhibitor is topically administered.

13. The method of Claim 12 wherein the substance that relieves skin irritation includes at least one substance selected from the group consisting of glyceryl monooleate, diphenhydramine, calamine, and a C_3-C_4 diol.

14. A method for improving the size and appearance of a healed wound in an individual in need of treatment comprising the steps of :

a) contacting the healed wound with a thermal insulating material that elevates the surface temperature of the healed wound, said thermal insulating material including an effective amount of at least one cyclooxygenase inhibitor; and

b) allowing the thermal insulating material to remain in contact with the healed wound. how long

15. A method for improving the size and appearance of a healed wound in an individual in need of treatment comprising the steps of :

a) contacting the healed wound with a thermal insulating material that elevates the surface temperature of the healed wound, said thermal insulating material comprising:

i) about 2 percent to about 5 percent of salicylic acid or a derivative thereof;

ii) about 2 percent to about 5 percent of acetylsalicylic acid or a derivative thereof;

iii) about 2 percent to about 5 percent of a compound selected from the group consisting of aluminum hydroxide, aluminum zirconium trichlorohydrex, and other metallic anti-microbials;

iv) about 2 percent to about 5 percent of a compound selected from the group consisting of diphenhydramine and other anti-pruritic agents;

v) about 2 percent to about 5 percent of a compound selected from the group consisting of ibuprofen and other non-steroidal agents specifically inhibiting prostaglandin E2; and

vi) about 2 percent to about 5 percent of a compound selected from the group consisting of non-steroidal agents specifically inhibiting cyclooxygenase 2; selectively

vii) and mixtures thereof; and

b) allowing the thermal insulating material to remain in contact with the healed wound.

16. The method of Claim 14 wherein the healed wound is a scar.

17. The method of Claim 14, wherein the cyclooxygenase inhibitor is present in an amount up to about 40 percent of the weight of the thermal insulating material.

18. The method of Claim 14 wherein the cyclooxygenase inhibitor is administered with a suitable pharmaceutical carrier.

19. The method of Claim 14 wherein the amount of cyclooxygenase inhibitor that is administered comprises from about 40 micrograms to about 400 micrograms of cyclooxygenase inhibitor per square centimeter of treated tissue.

20. The method of Claim 14 wherein the thermal insulating material comprises a hydrogel.

21. The method of Claim 14 wherein the thermal insulating material comprises a sponge.

22. The method of Claim 14 wherein the surface temperature of the scar is elevated from about 0.5°C to about 5°C.

23. The method of Claim 20 wherein a deodorant agent is included in the hydrogel to reduce surface bacteria and odor formation.

24. The method of Claim 23 wherein the deodorant agent is selected from the group consisting of: aluminum zirconium trichlorohydrex and zinc acetate.

25. The method of Claim 18 wherein the cyclooxygenase inhibitor is administered as a composition comprising from about 0.1 to about 10 percent by weight of said cyclooxygenase inhibitor in admixture with a pharmaceutically acceptable carrier.

26. A method for improving the size and appearance of a healed wound comprising administering to an individual in need thereof a therapeutically effective amount of a cyclooxygenase inhibitor wherein the cyclooxygenase inhibitor is present in a hydrogel.

27. A method for improving the size and appearance of a healed wound comprising administering to an individual in need thereof a therapeutically effective amount of an NF-kB inhibitor.

28. The method of Claim 27 wherein the NF-kB inhibitor is administered with a suitable pharmaceutical carrier.

29. The method of Claim 27 wherein the healed wound is a scar.

30. The method of Claim 29 wherein the scar is selected from the group consisting of a hypertrophic scar, a keloid, Dupuytren's contractures, acne scars, a reactive scar, an excessive post-operative scar, and a fibrotic scar.

31. The method of Claim 27 wherein the NF-kB inhibitor is present in a thermal insulating material.

32. The method of Claim 31 wherein the thermal insulating material comprises a hydrogel.

33. The method of Claim 27 wherein the amount of NF-kB inhibitor that is administered comprises from about 40 micrograms to about 400 micrograms of NF-kB inhibitor per square centimeter of treated tissue.

34. The method of Claim 27 wherein the NF-kB inhibitor is selected from the group consisting of: salicylic acid; acetylsalicylic acid; aryl, substituted or unsubstituted aralkyl, allyl, and substituted or unsubstituted, linear, branched,

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or cyclic alkyl esters of salicylic acid; aryl, substituted or unsubstituted aralkyl, allyl, and substituted or unsubstituted, linear, branched, or cyclic alkyl esters of acetylsalicylic acid; nabumetone; sulindac sulfide; sulindac sulfone; sulfasalazine; pharmaceutically acceptable salts thereof; and blends thereof.

35. The method of Claim 34 wherein the ester of acetylsalicylic acid is selected from the group consisting of: methyl acetylsalicylate, ethyl acetylsalicylate, allyl acetylsalicylate, and benzyl acetylsalicylate.

36. The method of Claim 34 wherein the salt of salicylic acid is sodium salicylate.

37. The method of Claim 27 wherein the NF-kB inhibitor is administered using a route of administration selected from the group consisting of: topically administering, orally administering, administering by injection, and combinations thereof.

38. The method of Claim 28 wherein the pharmaceutical carrier includes one or more substances that relieve skin irritation when the NF-kB inhibitor is topically administered.

39. The method of Claim 38 wherein the substance that relieves skin irritation includes at least one substance selected from the group consisting of glyceryl monooleate, diphenhydramine, calamine, and a C_3-C_4 diol.

40. A method for improving the size and appearance of a healed wound in an individual in need of treatment comprising the steps of :

a) contacting the healed wound with a thermal insulating material that elevates the surface temperature of the healed wound, said thermal insulating material including an effective amount of at least one NF-kB inhibitor; and

b) allowing the thermal insulating material to remain in contact with the healed wound.

41. The method of Claim 40 wherein the healed wound is a scar.

42. The method of Claim 40, wherein the NF-kB inhibitor is present in an amount up to about 40 percent of the weight of the thermal insulating material.

43. The method of Claim 40 wherein the NF-kB inhibitor is administered with a suitable pharmaceutical carrier.

44. The method of Claim 40 wherein the amount of NF-kB inhibitor that is administered comprises from about 40 micrograms to about 400 micrograms of NF-kB inhibitor per square centimeter of treated tissue.

45. The method of Claim 40 wherein the thermal insulating material comprises a hydrogel.

46. The method of Claim 40 wherein the thermal insulating material comprises a sponge.

47. The method of Claim 40 wherein the surface temperature of the scar is elevated from about 0.5°C to about 5°C.

48. The method of Claim 45 wherein a deodorant agent is included in the hydrogel to reduce surface bacteria and odor formation.

49. The method of Claim 48 wherein the deodorant agent is selected from the group consisting of: aluminum zirconium trichlorohydrex and zinc acetate.

50. The method of Claim 43 wherein the NF-kB inhibitor is administered as a composition comprising from about 0.1 to about 10 percent by weight of said NF-kB inhibitor in admixture with a pharmaceutically acceptable carrier.

51. A method for improving the size and appearance of a healed wound comprising administering to an individual in need thereof a therapeutically effective amount of an NF-kB inhibitor wherein the NF-kB inhibitor is present in a hydrogel.

52. A method for improving the size and appearance of a healed wound in an individual in need of treatment comprising the steps of :

a) contacting the healed wound with a thermal insulating material that elevates the surface temperature of the healed wound, said thermal insulating material including an effective amount of at least one antiirritant compound; and

b) allowing the thermal insulating material to remain in contact with the scar.

53. The method of Claim 52 wherein the antiirritant compound is administered with a suitable pharmaceutical carrier.

54. The method of Claim 52 wherein the amount of antiirritant compound that is administered comprises from about 40 micrograms to about 400 micrograms of antiirritant compound per square centimeter of treated tissue.

55. The method of Claim 52 wherein the antiirritant compound includes at least one substance selected from the group consisting of glyceryl monooleate, diphenhydramine, calamine, and a C_3-C_4 diol.

56. The method of Claim 52 wherein the thermal insulating material comprises a hydrogel.

57. A method for improving the size and appearance of a healed wound in an individual in need of treatment comprising the steps of :

a) contacting the healed wound with a hydrogel that elevates the surface temperature of the healed wound, said hydrogel including an effective amount of acetylsalicylic acid; and

b) allowing the hydrogel to remain in contact with the healed wound for a period of time sufficient to result in an improvement in said healed wound.

58. The method of Claim 57 wherein the acetylsalicylic acid is administered with a suitable pharmaceutical carrier.

59. The method of Claim 57 wherein the amount of acetylsalicylic acid that is administered comprises from about 40 micrograms to about 400 micrograms of acetylsalicylic acid per square centimeter of treated tissue.

60. The method of Claim 57 wherein the acetylsalicylic acid is present in an amount up to about 40 percent of the weight of the hydrogel.

61. The method of Claim 57 wherein the surface temperature of the healed wound is elevated from about 0.5°C to about 5°C.

62. A composition for improving the size and appearance of a healed wound in an individual comprising:

i) about 2 percent to about 5 percent of salicylic acid or a derivative thereof;

ii) about 2 percent to about 5 percent of acetylsalicylic acid or a derivative thereof;

iii) about 2 percent to about 5 percent of a compound selected from the group consisting of aluminum hydroxide, aluminum zirconium trichlorohydrex, and other metallic anti-microbials;

iv) about 2 percent to about 5 percent of a compound selected from the group consisting of diphenhydramine and other anti-pruritic agents;

v) about 2 percent to about 5 percent of a compound selected from the group consisting of ibuprofen and other non-steroidal agents specifically inhibiting prostaglandin E2; and

vi) about 2 percent to about 5 percent of a compound selected from the group consisting of non-steroidal agents specifically inhibiting cyclooxygenase 2;

vii) and mixtures thereof.

63. The composition of Claim 62, further including a thermal insulating material.

64. The composition of Claim 63, wherein the thermal insulating material is a hydrogel.

65. The composition of Claim 62, including up about 2 percent to about 5 percent sodium salicylate.

66. A method for improving the size and appearance of a healed wound comprising administering to an individual in need thereof a composition according to Claim 62.

67. Use, for the manufacture of a medicament for preventing or treating a condition caused by the appearance of a hypertrophic or a keloid scar on a healed wound, of an effective amount of a cyclooxygenase inhibitor, in combination with a substance that relieves skin irritation, an antimicrobal agent, and a thermal insulating material.

68. Use, for the manufacture of a medicament for preventing or treating a condition caused by the appearance of a hypertrophic or a keloid scar on a healed wound, of an effective amount of an NF-kB inhibitor, in combination with a substance

that relieves skin irritation, an antimicrobal agent, and a thermal insulating material.

69. A kit for improving the size and appearance of a healed wound comprising a cyclooxygenase inhibitor and a hydrogel.

70. A kit according to Claim 69 further comprising a sterile solution for mixing with the cyclooxygenase inhibitor.

71. A kit for improving the size and appearance of a healed wound comprising a hydrogel that includes a cyclooxygenase inhibitor.

72. A kit for improving the size and appearance of a healed wound comprising an NF-kB inhibitor and a hydrogel.

73. A kit according to Claim 72 further comprising a sterile solution for mixing with the NF-kB inhibitor.

74. A kit for improving the size and appearance of a healed wound comprising a hydrogel that includes an NF-kB inhibitor.

75. A kit for improving the size and appearance of a healed wound including a hydrogel and a composition comprising:

i) about 2 percent to about 5 percent of salicylic acid or a derivative thereof;

ii) about 2 percent to about 5 percent of acetylsalicylic acid or a derivative thereof;

iii) about 2 percent to about 5 percent of a compound selected from the group consisting of aluminum hydroxide, aluminum zirconium trichlorohydrex, and other metallic anti-microbials;

iv) about 2 percent to about 5 percent of a compound selected from the

group consisting of diphenhydramine and other anti-pruritic agents;

v) about 2 percent to about 5 percent of a compound selected from the group consisting of ibuprofen and other non-steroidal agents specifically inhibiting prostaglandin E2; and

vi) about 2 percent to about 5 percent of a compound selected from the group consisting of non-steroidal agents specifically inhibiting cyclooxygenase 2;

vii) and mixtures thereof.

76. A kit according to Claim 69, further including an anti-pruritic compound and an anti-microbial agent.

77. A kit according to Claim 69, further including at least one device for affixing the hydrogel to an affected area of skin.

78. A kit according to Claim 71, further including a cyclooxygenase inhibitor for oral administration.

79. A kit according to Claim 71, further including diphenhydramine for oral administration.